ARCHITECTURE

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PLATES AND ILLUSTRATIONS

A CHANNEL OF ARCHITECTURAL CRITICISM.

HERMAN KOBBE.

UP to the present day in America we have been so busy attending to the immediate wants of our society that the more complex parts of our social machinery have necessarily been neglected. Hence it is not surprising that in the domain of architecture our energies should have been directed at first toward the construction of buildings urgently needed by our growing community. The kinds of buildings which are needed only by a highly developed state of society are now becoming proportionately greater in number. In fact, we may say that the actual building part of architecture is receiving its full share of attention for the present. At this stage of civilization, however, much of the abundant individual energy goes to waste in opposing and cancelling other people's energy. It is as though in a huge power house a third of the wheels were geared to work in the opposite direction from the other two thirds. This accusation can be made against architecture, as much as against our other social activities. Ours is a specializing age, and the specialty of our best architects has been building work, through force of circumstances. So exclusive has their attention been that only in recent years have they given any time to teaching, and none have put any critical literature before the public.

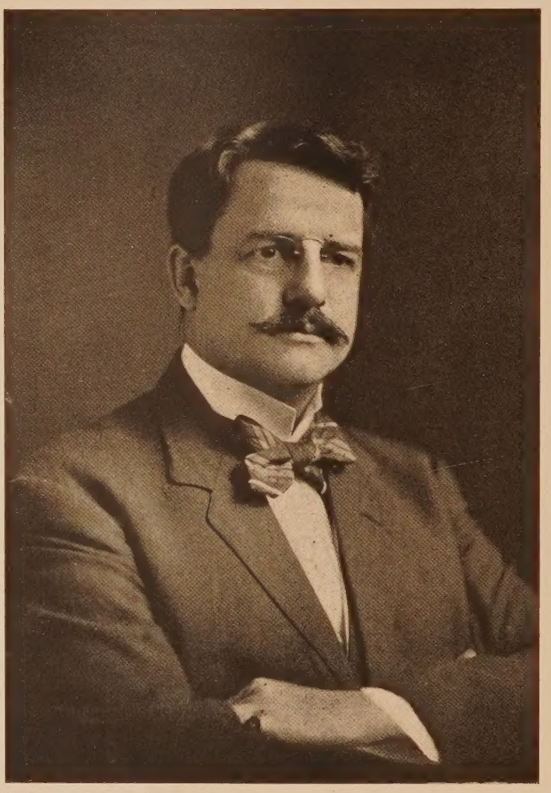
Quite as important as the schooling of architects and the supervision of buildings by architects, is the criticism of the architects' finished work.

The result of the absence of criticism has been that our architects, capable and mediocre, have been hard at work putting more or less interesting ideas into building form ignorant of public opinion, since public opinion could reach them only through fragmentary conversation and stray newspaper cuttings. They have also been working at cross purposes with one another, since no consensus of professional opinion is ever published. In fact we are terribly busy producing architecture which reflects by its lack of unity, the conditions incidental to a society without unity. Is lack of unity the noblest aspect of modern times that our architecture should display it so conspicuously? Is the vaudeville show scattered up and down both sides of Fifth Avenue the expression of our best American thought? Those houses are so many material records of contradictory ideas. The Touraine castles passed on to us through the architects of Louis Phillippe, the Venetian palaces next door, are they indicative of our social structure?

Our legislators are making painful steps toward regulating legislatable things, and by these means are making our life more harmonious and less wasteful. They are bringing the law to bear to encourage concerted action for the common good; one cannot legislate the volutes of a capital, but one can criticise them. And criticise them we must if we have any ambition to make our architecture a majestic symphony of our world ruling qualities, instead of this mere discordant bleating and crowing. Furthermore, the criti-

cism must be complete and not fragmentary. It must be our orchestra leader, to guide us from phrase to phrase, while leaving to each musician the power to put his own personality into the tones he produces. Occasional criticism is of no more use than a leader who gives his baton a wave when he feels like it, and lets the musicians ramble on between whiles as they will. For comic opera purposes the effect may be excruciatingly funny, but our state is to be something more symphonic than that. *Gross gedacht*—how can we express that in our architecture?

Our weakest point architecturally is not in education, for our system allows enterprising youth to break through the ancient history crust and seek knowledge abroad. Is it not in our draftsmen, many of whom are masters of their craft. It is not in our light and well-equipped work rooms. Our weakest point architecturally is somewhat like our weakest point in everything else, that our architects are not a corps working in unison but a well intentioned mob. They are without information about a vitally important subject, namely what their fellow architects and the general public think about the latest architectural productions. It is the purpose of this paper to encourage the establishment of a council of criticism in every large city of the Union. The task, far from being a Herculean one, is easy and economic. Once established it would be no difficult matter, though one requiring considerable patience to gradually develop something like an intelligent public opinion, to collect criticisms from the public and from architects, to add the criticisms of the members of the council themselves, and to publish all of them widely.



Architects of To-day.

MR. D. KNICKERBACKER BOYD, PHILADELPHIA.

Let us see what the personnel of the council in New York might be. It should have only as many members as can collect and pass competent judgment on criticisms submitted to them, or only as many as would be able to give in their collectivity a broad point of view themselves. In other words, the minimum number should be fixed by whichever of these two considerations required the more men. They should also be delegates from the most important educational societies of the city, so as to make sure of their being competent men whose opinions will be worth listening to. They should not all be architects, since in a complete criticism of a building one certainly demands an untechnical as well as a technical point of view. If each of the leading architectural societies sent one delegate, and each school of architecture in the city one, and if these chose a few members at large including at least one constructing and sanitary engineer and one artist not an architect, there would be a body of about ten men who could do their work informally and quickly.

The council would meet monthly, by daylight, in a suitable room. Here the criticisms written by the ten members would be read and discussed, as would also the criticisms submitted from outside. The different members would criticize any architectural work they wanted from any point of view, artistic, sanitary, economic, utilitarian; or any aspect of architecture as a profession or art. Any phase of architecture, from the first schooling of the architect to the final completion of a building would be legitimate subject for criticism. The various critical essays or comments duly signed would then be published under an appropriate title in a special section of the most widely circulating architectural magazine and in several reviewing periodicals and newspapers. In a subjoined section would be the approved criticisms from other sources.

To fully understand the value of such a body alike deliberative and educational, one must consider the probable result of their work. The two classes affected by their criticism would be the architects, and the public.

Its most general effect on the architectural profession would be to bring home to its members the fact that they are members of a trained corps and not casual people in a crowd. It would keep them informed of the opinions of their ten representative cooperating critics, of the opinions of their brother architects, and of public opinion, so that words of condemnation or of approval would reach them quickly and in explicit form from any of these three sources. It would then create a feeling of social unity which would find its expression in an interesting and wholesome unity of design. It would improve our code of building laws. It would give every architect the chance to defend his own work, or to criticise it unfavorably, an instructive proceeding for all of us to watch.

The effect of this criticism on the public would be to awaken and keep awake public interest in the buildings which are to shelter them in their many occupations. It would give a man with architectural ideas to exchange the chance to publish them approved and voted "interesting" by a high authority. It would give the public an architecture in which unsympathetic and foreign elements would be steadily discouraged by adverse criticism from that public itself.

The hoped for result of this criticism may be summed up in a few words: To increase the intimacy and mutual understanding between house and man.

It has often been the lot of this science-art to be misunderstood and underrated by the public. Powerful by virtue of its insistent presence in all our social activities, misunderstood because of its ambiguity, its mixture of the esthetic and the utilitarian, no wonder that in its fluctuations it has hastened society to one revolution after another. Music has undoubtedly outstripped the other arts in doing violent individual harm. But it is a fleeting thing, it has never had the collective volume to do permanent injury to a state of society. Our misbegotten popular music-noise may be aggravating social evils while it lasts, but it does not stand bulkily around us and over us day and night. With it or without it New York can still exist, it is not an integral part of us. But have we ever reflected that by putting a man into a house brown without and black within, we have retarded his mental development just as much as we would by refusing him books? The fact that he is satisfied with the house makes the matter so much the worse. We are just now sloughing off our black houses, and without any guiding opinions are rushing in our characteristic fashion to an opposite extreme of white marble. Soon everything may be white marble, markets, commercial buildings, tennis club houses, private houses, stables. A society born in white marble houses, educated in white marble schools, working in white marble offices, playing in white marble amusement places, will go down in ruins before the eventual invasion of Oriental thought or an earlier revolution starting at home. But we will go from one vagary to another as long as the unthinking, obvious part of public opinion is all that reaches our architects. An architect is not necessarily a deep philosopher. In expressing what he thinks is the truth the average architect naturally takes the obvious and not the profound point of view. It is this very obvious quality which makes us vulnerable to an attack profoundly thought out, makes us vulnerable even to mere bad luck.

To cite an example: The obvious characteristic of a bank is that it is a powerful machine for turning public capital into the money bags of its directors. So the architect produces, quite rightly, as far as his point of view goes, a magnificent building, always in white marble. And the most magnificent spot in it is the cabinet in which the directors meet, which is ornamented with a full Corinthian order. This is the architectural expression of the directors' profoundly thought out attack on society. No architect *could* reform the banking system because no utilitarian solution of a bank problem would ever win a competition. Furthermore, no legislation will permanently cure the financial system, until our present financial buildings are rebuilt, for all future directors will still meet under those same marble columns, and consequently keep their present ideas as to whose benefit the banking system is really for. One will never be able to convince a man that he is a public servant by seating him on the main axis of an architectural composition.

Similar mistakes are being made constantly because the profound thinkers of our community do not concentrate a stream of criticism into a recognized channel. And so with the country exceedingly prosperous our misconceived financial system wrecks itself, and one sees elsewhere how architects are paving the way for disorder and waste by the same ignorance of what the best and latest ideas in the community are.

Thus in our schools. The greatest modern educators come more and more to the opinion that retrospective study is only good as a means to further pioneering work. Namely, advance scientific work is now thought to be by far the most important branch of education. Yet no one has informed our architects of this fact, so that all over America we are building for our future scientists schools which recall in a diluted form the social condition of Elizabethan England. In such schools ten per cent. of an unsensitive student's energy goes into resisting the atmosphere of intellectual aenemia, and a sensitive student could hardly work there at all. The imitative feeling and self satisfaction of such a school would make a bungle of almost any scientific work. And yet we have done even our army the honor to suppose that it can stay up-to-date and efficient with officers trained in a school recalling by its architecture the monasticism of the Middle Ages.

A mistake, traceable to the same ignorance of the best thought in the community, is to be seen in our architectural conception of a railroad terminal. But here we have an example of clumsiness of expression rather than a mistaken conception of why a railroad exists. They are evidently transportation buildings, it takes no great philosopher to see that. But what do they express? A Roman obstinacy. "We are here to stay. All trains stop here and none leave, for our railroad is striving for absolute rigidity and immobility." A Cæsar would have been pleased to anchor one of his colonies to Rome by such a means. But far from demanding that our trains should be permanently anchored, everyone demands as much speed as is consistent with safety, so that our stations could hardly be too lance-like in character. But there has been no one to suggest even such an obvious fact as this.

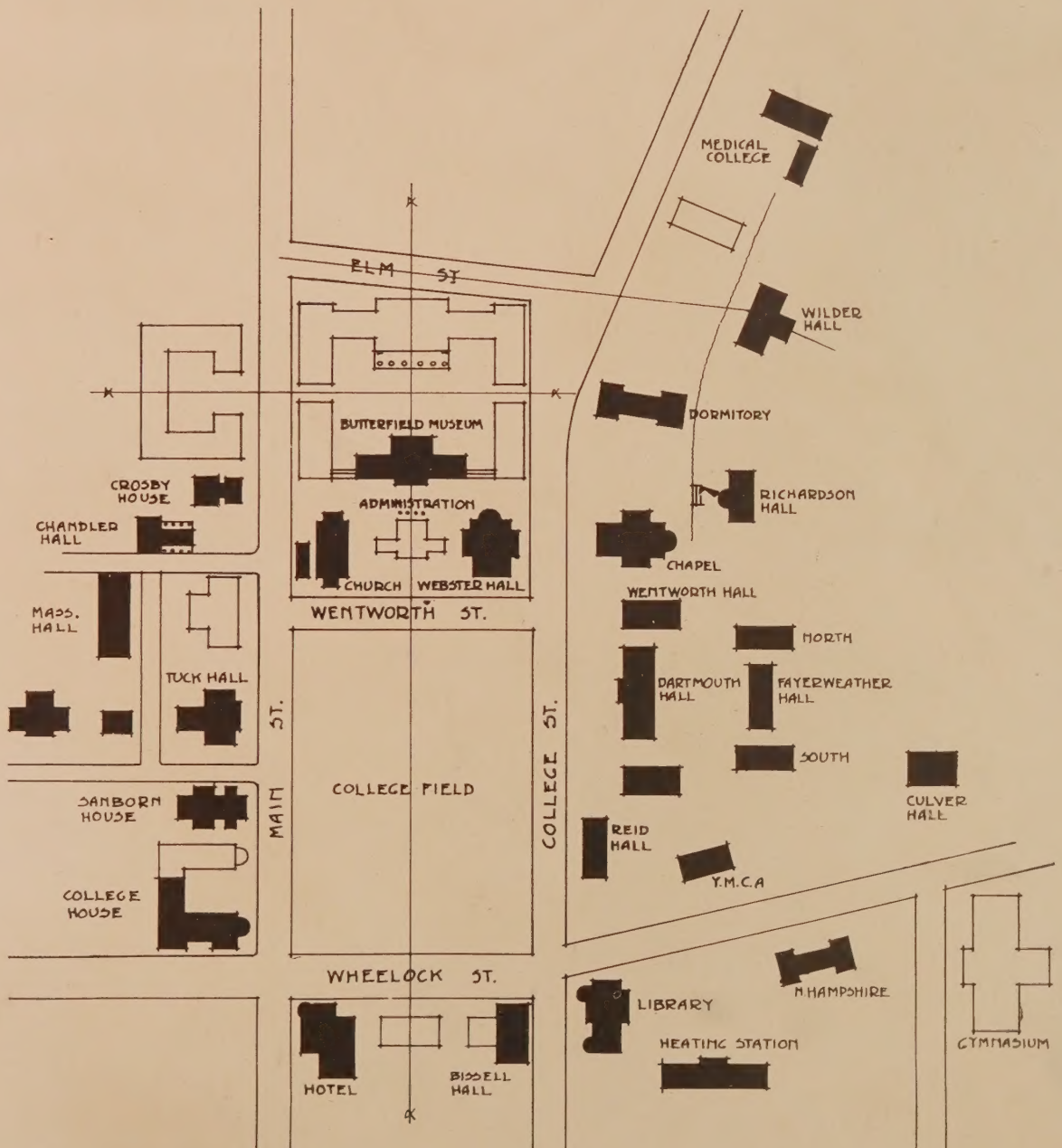
Nor is our architecture suffering from lack of criticism only in its artistic side. Badly lighted, unventilated rooms, insufficient closed courts, mere human rat-traps, are still being built, as are also unfireproof houses; all of which menace the public welfare as much as false artistic ideals. But a mob rebellion against these, and such other nuisances as put public architecture indirectly under a disadvantage, cannot do any good at all. If the council of criticism wrote each month a little article on whatever law seemed to them to need a change most urgently, and if it would state exactly how the law should read, the overworked legislators would be only too glad to accept their valuable professional opinion. It would at least be above any charge of political dirty work. And an adverse criticism on a building based on such a charge as that it shut off light from a neighboring house, would awaken public and professional attention to the fact that there are many violations of true social spirit which are out of reach of the law, but which should not escape public censure.

Also in such a matter as the bill board nuisance the council could act effectively. Here no private individuals can do anything, since they run up against the most selfish and stupid element in the world of commercial financeering. But if the architectural profession, through its ten mouth pieces, put the case on its merits before the public, and they gave their opinion through the same official channel, a channel which no money could possibly block, perhaps there would result the most extensive boycott that the country had ever seen, until the signs came down. There are also other things which concern our public ways which are quite as much in the line of architecture, and as such would come

(*Continued page 184*)

OLD AND NEW DARTMOUTH HALLS, DARTMOUTH COLLEGE, HANOVER, N. H.

Chas. A. Rich, Architect.



GENERAL PLAN OF DARTMOUTH COLLEGE

FAYERWEATHER HALL.

NEW HAMPSHIRE HALL.

TUCK HALL.

WHEELER HALL.

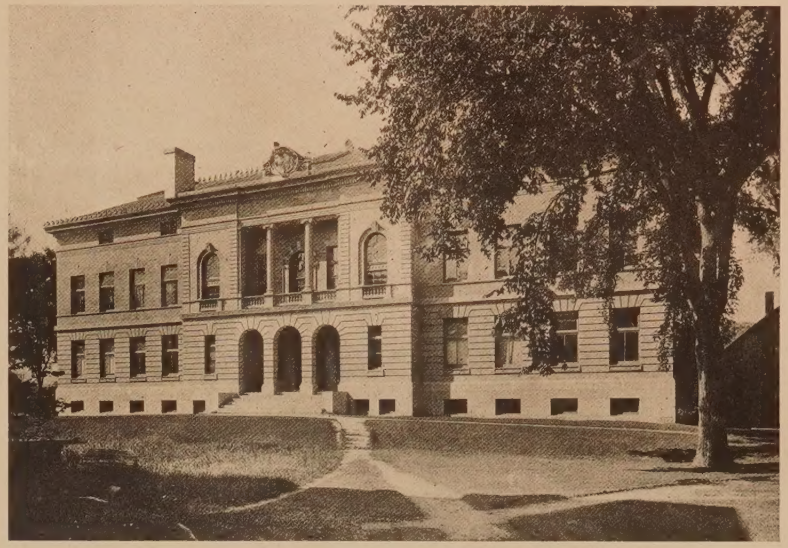
DARTMOUTH COLLEGE, HANOVER, N. H.

Chas. A. Rich, Architect.

COLLEGE HALL.

WEBSTER HALL.

MASSACHUSETTS HALL.



BUTTERFIELD MUSEUM.

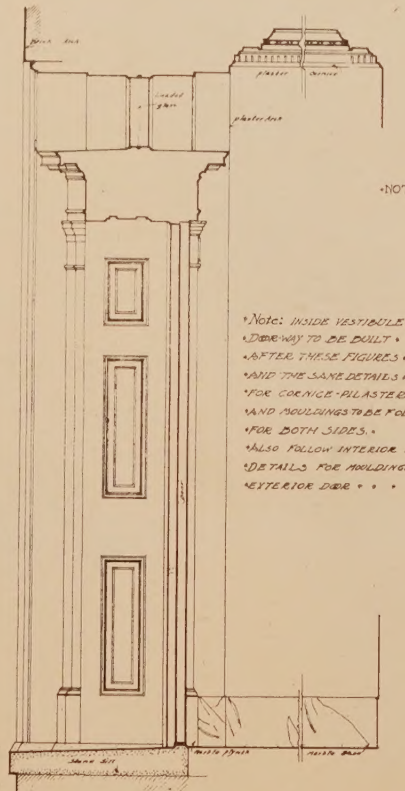
DARTMOUTH COLLEGE, HANOVER, N. H.

Chas. A. Rich, Architect.

MEASURED DRAWING, PETIT TRIANON, VERSAILLES.

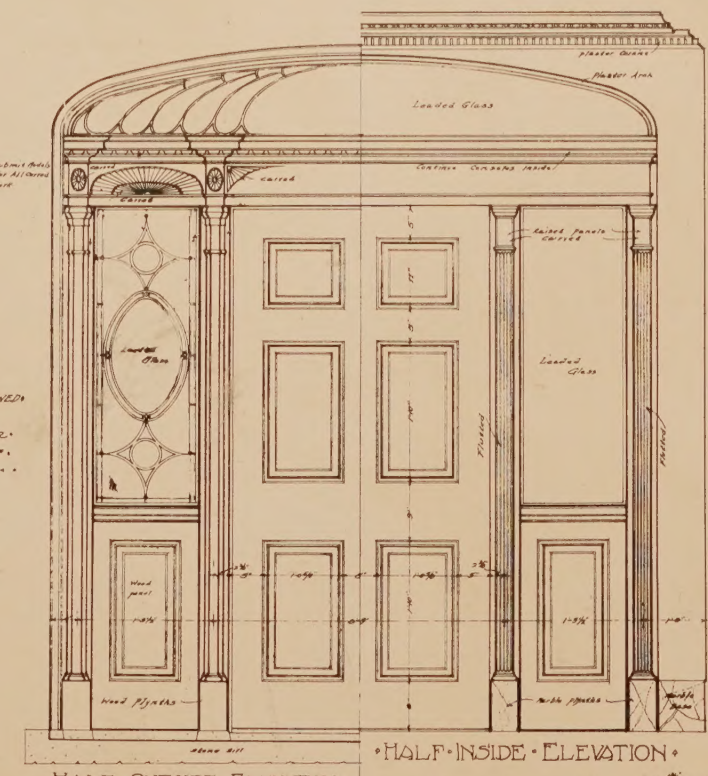
Drawn by Homer E. Bartlett.

Three houses designed by A. F. Balfour Paul, Architect.

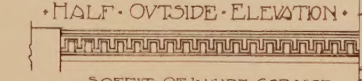


Note: INSIDE VESTIBULE
DOORWAY TO BE BUILT
AFTER THESE FIGURES
AND THE SAME DETAILS
FOR CORNICE-PILASTERS
AND MOULDINGS TO BE FOLLOWED
FOR BOTH SIDES.
ALSO FOLLOW INTERIOR DOR.
DETAILS FOR MOULDINGS OF
EXTERIOR DOOR . . . . . .

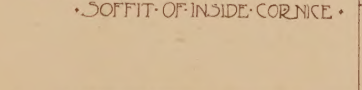
SECTION THRO DOOR.



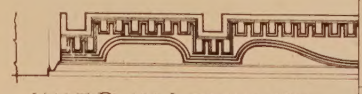
HALF INSIDE ELEVATION.



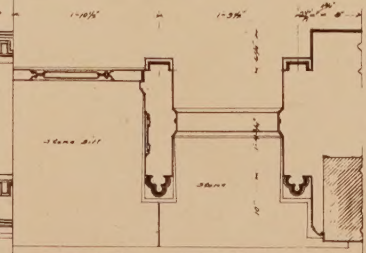
HALF OUTSIDE ELEVATION.



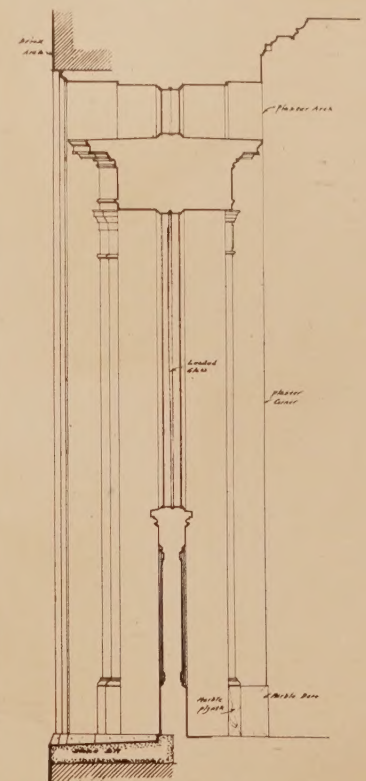
SOFFIT OF INSIDE CORNICE.



HALF PLAN LOOKING UP.



HALF PLAN LOOKING DOWN.



SECTION THRO SIDE-LIGHTS.

DETAIL OF FRONT ENTRANCE . .
RESIDENCE FOR W.N. PERRIN . . .
EDCLID AVE. EAST CLEVELAND.
SCALE - 1½" INCH = ONE FOOT . . .

GEO. H. STEFFENS.		
ARCHITECT.		CLEVELAND O.
BUILDING NO. 114		SHEET NO. 247
DRAWN BY J.F.S.	TRACED BY S.F.F.	DATE MARCH 14 '08
CHECKED BY J.F.S.	APPROVED BY G.H.S.	DATE " 15 '08
REVISED BY		DATE
REVSN APPROVED BY		DATE

RESIDENCE, W. N. PERRIN, CLEVELAND, O. (See detail of front entrance opposite) Geo. H. Steffens, Architect.

(Continued from page 175)

under the watchful eyes of the council of criticism and their supporters.

And so you can inquire into every department of architecture and you will find everywhere obviousness, and sometimes carelessness in great plenty. The resulting instability is a very good indication of our social state, and the accumulation of buildings now going on makes the conditions always worse. Our architecture is voicing with a voice which grows louder with every new house we put up a multitude of thoughts, which, if they are not all of them worthless in themselves, are at best contradictory and chaotic.

Perhaps before many months are up we may see the channel of criticism officially opened. We may be able to read in concise form the candid opinions of ten picked men on the architecture of New York. We may have a chance to learn something in this way, and a chance to publish where it will be read an opinion of our own on what we see building around us. We may hear criticisms from other cities which would enlarge our outlook on life, and eventually foreign ideas may flow to us by the same channel in exchange for ours.

PROFESSIONAL COMMENT.

ALTHOUGH New York has already a number of associations of architects its new recruit, known as the Society of Architects, of which ARCHITECTURE has previously spoken, is now actively in the field to expand its membership, and during the latter part of October it held a conference with a large number of non-members at the Grand Union Hotel, for the purpose of explaining its purpose. The meeting was presided over by Mr. Benjamin Driesler, the president, and was attended by about seventy-five men, most of whom are unaffiliated with any of the existing societies. The purposes of this society, as explained by its officers, are primarily to take care of the business interests of the profession in its dealings with the city departments, and the officers wish to state distinctly, that in doing this work they did not expect in any way to encroach upon the prerogative of the Institute or to duplicate in any way the work of any other now existing body. The Business Association of Architects in Chicago, and similar bodies in western cities, were pointed to as the models to be followed, and the officers hope to work hand in hand with the Institute in furthering the objects which they have elected to accomplish. The program of the society also includes an active propaganda for the licensing of architects and for the consolidation of the Tenement House Department and the Bureau of Buildings.

The meeting was addressed by several non-members, including Mr. Charles H. Israels, Mr. D. Everett Waid, Mr. Oscar Lowinson and Mr. Arne Dehli. Mr. Israels stated that his experience with the city departments convinced him that such a business organization might be very useful to the profession, but that he considered it of paramount importance that the speculative element, which was responsible for so many of our irritating laws and statutes should not be allowed to get in control. He further stated that he sympathized with the consolidation of the Tenement House and the Building Department only under specific conditions. That these conditions were that the head of the combined department should receive a salary so large that he would be sure to keep away from all entangling alliances with the building trades; that his appointment should come direct from the Mayor and not from the Borough President; that a system of licensed constructors, somewhat after the manner suggested by Commissioner Butler and the Building Code Revision Commission should be required by the City, and that the powers of a Board of Examiners, with a reconstructed membership, should be extended over the Tenement House Act. Mr. Waid stated that the experience in Chicago proved that the Institute and a business association might work hand in hand for the benefit of the profession, and the meeting broke up after an appointment of a committee of three non-members to confer with three members to be appointed by the Chair, to further consider ways and means.

THE writer in *Country Life in America* has performed a distinct service to the profession of architecture in his investigation of the cost of building in various localities. It will, undoubtedly, explain to Mr. New Yorker why he cannot duplicate the house which his friend, who lives in Buffalo, has erected, for the same price; and to Mr. Commuter why he cannot erect a house which Mr. Smith has built in the Adirondacks for $2,000—on the shores of Long Island Sound for less than $5,000—and if it succeeds in doing this it will prevent many members of our profession having sleepless nights. The writer states that this condition of affairs is well illustrated by an experiment tried by a well-known architect, who erected a country house near Reading at a total cost of $8,650. Detailed plans, specifications and photographs were sent to a number of builders in various sections of the country, requesting them to submit estimates on the property, provided it was built in the particular locality where the builder resided. These estimates range all the way from $14,206 in New York under the most expensive conditions, to $5,171 in Bangor, Me., where lumber is plenty and labor cheap. No attempt was made to cover the entire country, but sections were selected representing the different classes of conditions. The estimates are from large and small cities and country towns, North and South, and are as follows: New York and vicinity, $11,365 to $14,206; Boston and vicinity, $12,232; Philadelphia and vicinity, $9,750 to $10,500; actual cost near Reading, $8,651; Syracuse, N. Y., $7,775; Anniston, Ala., $6,240; Bangor, Maine, $5,171.

ARCHITECTURE has had some experience of a more local kind, which further illustrates the difference in cost between short distances from the Metropolis, for the writer recently found that a small house erected on the shores of Long Island, twenty miles from New York would cost one-third more than the same house built at about the limit of commuting distance on Long Island Sound.

WE know nothing of the merits of the particular controversy which was recently brought to the attention of the District Attorney between a well-known firm of building operators and the Master Plumbers' Association, but we are glad to see that Mr. Jerome, after investigating both sides of the story, has had the proposed indictment quashed with the remark that the man under the charges considered himself "ethically right."

The methods pursued by a number of operators in this city has frequently brought disaster to architects, as well as other workers in building trades, and the sooner it is thoroughly investigated and proper legal enactments made to

meet the situation the better. This method is somewhat as follows:

A building operator sells a plot to a dummy for a price considerably in excess to the real value of the lot, and in addition thereto he makes a building loan to the dummy. The dummy proceeds with the building and with the eagerness of the building trades for contracts has little trouble in erecting the structure under contracts, in which the largest number of payments are deferred to almost the completion of the building. When the building is about three-quarters done liens begin to be filed, in some cases that we have known of really at the instigation of the man who made the loan. These liens pile up and the loan man forecloses, but as his blanket mortgage and his building loan is so much larger than the real value of the lot there are no bidders against him and he bids in the property, and under his mortgage all the lienors from the architect to the most humble man on the job see their claims wiped out, and the loan man receives the building in a state representing a large percentage of the total cost of erection although but a small proportion of the material and labor represented in the structure has been paid for. The trade associations are attempting to combat these methods by refusing to do any work for operators on any job in which they are interested until the debts upon older buildings which have gone through this process are cleaned up, and in the present state of the law in which there is no legal obligation on the part of the holder of the mortgage to pay these bills, it seems to us that the trade associations are certainly "ethically right" in their attitude when they are sure that this method has been pursued.

AT the October meeting of the Architectural League of New York a large number of members and their guests had an opportunity of viewing their home city from the standpoint of a member of the Areo Club. Through the courtesy of the Metropolitan Life Insurance Company and architects, Le Brun & Sons, a reception was tendered to the Architectural League on the 41st story of the Metropolitan Tower on October 13, and, after the members had become sufficiently dizzy in gazing upon the city from this enormous height they were lowered to the 31st story where more formal courtesies were extended under the direction of Mr. Harold Caparn, Chairman, Committee on Current Work.

THE Architectural League of New York has announced its 24th annual exhibition in the galleries of the American Fine Arts Society from January 29 to February 22. Arrangements have been made so that the works entered for this exhibition may go on circuit both to the Boston Architectural Club, which holds its exhibition prior to that of the League, and later to that of the T Square Club and the Philadelphia Chapter A. I. A., which has selected March 28 to April 18 as the date of their exhibit.

DARTMOUTH COLLEGE BUILDINGS.

THE accompanying photographs show some of the recent buildings designed and erected in Hanover, N. H., for Dartmouth College, by Charles A. Rich, Architect, of New York.

Prior to about 1895 the College had erected few new buildings, but under the able leadership of Dr. William J. Tucker, who was elected President in the spring of 1893, the advance was so rapid and the needs so pressing, that one building after another was erected. Mr. Rich was instructed to lay out a general scheme of buildings, and from this general scheme have sprung the buildings shown.

By far the most interesting building connected with Dartmouth College at that time was Old Dartmouth Hall, the centre of a trio of her oldest buildings. The building was erected in 1784. The central foundations were massive tree trunks cut from the campus immediately in front, now known as the College Green. The architect of it is unknown, as all public buildings at that time were built by head carpenters who studied and reproduced still older buildings, and it was much like Nassau Hall of Princeton, but with local modifications. On February 18, 1904 Mr. Rich received a telegram from Dr. Tucker, as follows: "Old Dartmouth Hall is burning. Can you replace the building in fireproof materials, exactly as at present?" to which Mr. Rich replied in the affirmative.

There were but two windows and one corner piece that remained at the end of the fire, and only the foundation marked the spot where it had stood, one of the most beautiful Colonial buildings in America.

Mr. Rich at once set to work to find the best old photographer's negatives of the building, and fortunately found one taken in winter directly on the centre axis of the building and five or six hundred feet away. The building was 150 feet long and by throwing up this negative so that the outside lines spread themselves to 37½", he had a nearly accurate working elevation of the old building, different only in foreshortening. In re-designing the plan, an entirely different interior was required, demanding a few more feet in height, but by cutting down the grade a little the increase in window sizes was not noticeable, and the general appearance was kept the same. The old size window and the new size may be seen at the sides of the entrance, where was placed a commemoration bronze tablet.

Looking up also many old photographs of parts of the building, he threw them up to an accurate full size, marked them plainly in the silverprints, and from these drew full size details of all the parts ever made. The result of these studies is shown in the accompanying photographs of the old building and the new building. The plan in general of the College property is given together with the buildings erected and to be erected in future.

THE BUILDING CODE REVISION.

THE work of the Building Code Revision Commission of New York City still continues and after a silence lasting for several months it has been heard from in relation to the most important question with which it has to deal, namely, the limitations of height. Under the provisions of the New York Charter all such limitations must be submitted to the Board of Estimate and Apportionment coming before the Board of Aldermen for final passage, and it is for that reason that this portion of the proposed new Code has become public property at this time. The suggested limitations are as follows:

Limits of Height.—All buildings hereafter created shall be limited in height except as herein otherwise provided, in general accordance with the widths of the streets on which they face, as follows:

The height of all buildings hereafter erected shall not exceed three times the width of the street upon which they face and shall not exceed 300 feet except that where the width of streets is less than 45 feet the height of buildings may be 135

feet. When buildings face upon a park, square plaza, or similar public place, the height shall not exceed 350 feet.

Provided that no fireproof building of Classes E and F, except office buildings, observatories and grain elevators, hereafter erected or altered shall exceed 150 feet in height.

Classes E and F referred to are as follows:

Class E.—Office buildings, lofts, stores, warehouses, restaurants, markets, refrigerator plants, stables, factories, work shops, printing houses, slaughter houses, rendering plants, breweries, sugar refineries, observatories. All buildings of this class hereafter erected over 59 feet in height shall be of fireproof construction, except as otherwise provided in Section 25 of this Code.

Class F.—Light and power plants, car barns, garages, smoke houses, laboratories, railroad freight depots, oil houses, oil refineries, grain elevators, foundries, coal pockets. All buildings of this class hereafter erected shall be of fireproof construction.

The practical application of the system laid down in these suggestions would be a flat limitation on the average side streets, most of which are 60 feet wide to 180 feet in height, and the buildings on the avenues which are mostly 100 feet high would be allowed to reach the maximum height of 300 feet, except when on park-ways where the 350 feet limit might be touched. The average business building not occupied by offices would be limited to 150 feet, while the non-fireproof limit, which is now 75 feet, would be cut down to 59 feet in the case of all business buildings.

There is no doubt that this proposition will meet with a large amount of opposition from both sides, both from the radicals who will claim that there is no restriction, as well as from the advocates of the City of Towers, who believe that an owner has the unalienable right to erect the Tower of Babel if he so desires.

All such measures must, of necessity, be compromises, and at least this is a beginning in the right direction, and there is no question but that the public sentiment has been so much aroused that a restriction of some sort will, unquestionably, be obtained.

The one class of improvements which would be affected more than any other by the enactment of this ordinance, will be the many private dwellings which are being altered into business premises, and which, under the present act, can be carried up to 75 feet with their existing non-fireproof construction.

In the central portions of the city, south of Central Park, a large amount of the work is of this character, but the restrictions are, nevertheless, in the lines of progress, although it does seem to us that in the final determinations of the Commission the question of the fire hazard has been considered paramount to that of congestion, as the restriction for warehouses is considerably below that of office buildings.

SELECTING FITTINGS.

IT may not be a happy day for the client, but it is a very important day for the client's wife, when the stoves and ranges, the mantels and hearths, the bath and its plumbing, and the hardware for their new house have to be decided on. The specification probably says that all these things are to be selected by the architect. But the architect must be a bold man if he selects them himself without express permission. His idea, perhaps, is that they should harmonize with the architecture; but the lady's intention—and not a very unreasonable one when one thinks about it—is that they should rather suit the furniture. Seeing the house and its contents seldom suit each other very well, there evidently is a possible source of quarrels. It is, therefore, a wise instinct perhaps, that subdues our domestic architecture, at least of the smaller sort, into a comparatively styleless, colorless thing; a mere background, against which successive tenants may show off, without very jarring effects, such types of furniture as they may happen to buy or fancy. The man of taste, a generation ago, built his Gothic house, or his Classic house, or his Renaissance house; and then vexed his soul from day to day unless every bit of its contents was Gothic, or Classic, or Renaissance, too. Such an ideal may be well for a church or other monumental building; but it is too severe for humbler conditions. People cannot live up to it—unless, indeed, they happen to be millionaires with artistic instincts. The ordinary house-architect, will be wise, under the circumstances, rather to efface himself, and to be content that this work, for once, should fall into a secondary place.

But this hardly answers when we come to public buildings. They usually have some attempt at style—some sort of definite key in which the whole performance is played; and here, also, we have to do, not merely with a client and his wife, but with a committee of men, generally of sharp business capacity, and more or less short of time. The larger the working committee, the more hurried they will be, for each one of them wants time in which to record his convictions and his principles, and his canons of taste. A wise architect will spare himself and them by giving them the smallest possible number of questions to settle. A committee is always ready to settle, wisely or unwisely, any point that may be brought before it; but, unless the architect definitely raises them, it is practically willing, in most cases, to leave them to his judgment Experience will teach him to let sleeping dogs lie; and to feel that a committee is seldom acting to better purpose than when it refrains from acting at all.

Suppose, however, that the committee decide to meet the architect, and to avail themselves of his experience in the matter. They are sure to imagine that by going about with him, at every point explaining their wishes, they are doing him valuable service, and saving him a large amount of trouble. He, on the contrary, unless he is very young and inexperienced, will know that he will get on much better without them, and, also, much faster. This member will have to be argued with, and that member coaxed, and the third member taught elementary facts about building matters; and thus the architect, instead of being left quietly to choose what he sees to be most desirable, will be hampered at every turn, and will be compelled to run a sort of adult school at the very time when it is most desirable that he should be left to use his judgment. Questions—not always asked with an honest view to the obtaining of useful knowledge—will be pouring down upon him, two or three at a time. The friends of unsuccessful competitors will seize the opportunity to ask him all sorts of things that he cannot instantly answer; and if information is not every moment oozing out of his finger-ends, they will, perhaps, whisper: "How much better if Mr. Bluster or Mr. Sawder had been our architect. They could have told us these things at once."

The committee-hampered architect, before he sets out on the excursion of the day, should be sure to make a sufficient memorandum of all the necessary facts: the widths and depths of fireplaces; the right-hand or left-hand opening of oven doors (if there are any); the forms of spaces into which lavatory basins are to fit; widths and thicknesses of styles and rails for mortise locks, and the like. Unless he has been very fortunate, he will himself have previously designed and obtained tenders for gasfittings, electric-light

brackets, and so on. But he must not make too sure that all is well, even then. An economical committeeman may at any moment make his labors of no avail by advising the committee should reject the architect's designs for these things, and buy them ready-made. It will be cheaper, he explains, and the committee will see just what they are going to get, and can please their own taste. From all this, one may infer that selecting fittings, if it is not a failure, requires a world of tact; for, as Carlyle says, "When the child governs the house, what dexterous practice on the nurse's part is sure to be necessary!"

THE WEIGHING OF BUILDINGS.

IF one goes through the offices of one of the big skyscraper construction companies these days he may see a roomful of young men all figuring away on interminable sheets of paper. The layman is astonished to learn that they are weighing skyscrapers, and that the tallest and most extensive buildings, up to the thousands of tons, are carefully weighed before they are built. The evolution of the tall building has brought forth remarkable engineering specialization along many lines but none more noteworthy than in the case of the skyscraper weighers, for this weighing of the skyscrapers is no easy job. One cannot dump the material, like a pound of sugar into a pair of scales and declare there is so much weight, because, in the first place the scale has never been invented that will weigh a hundred thousand tons, and, in the second place, the material is not on hand. A skyscraper must be weighed before it is built—before the first caisson is sunk for the foundation or the first steel column is set up. The scales are pencil and paper, balanced by specially trained brains. And, finally, the operation of weighing a modern tall building may cover, when completed, as many as thirty to forty typewritten pages.

BOOK REVIEWS.

THE ARCHITECTS' AND BUILDERS' POCKET-BOOK. Frank E. Kidder. John Wiley & Sons, New York. Revised fifteenth edition. 1908. Morocco, $5.00 net.

The changes in this edition consist of the correction of all typographical errors reported to the publishers, and the rewriting of Chapters XXIII. and XXIV. This work has been done by Rudolph P. Miller, who was for ten years connected with the Department of Buildings, New York city, and for the last five years as its Chief Engineer. During his connection with the Department of Buildings he had large opportunities for studying fireproof construction particularly, and gave the subject of Reinforced Concrete much study, drafting the first regulations ever promulgated in this country regarding its use. These regulations have formed the basis of the regulations since adopted by the cities of this country, in many instances the major part of them being copied verbatim.

Chapter XXIII. have been revised, one half of the matter in the old edition having been used again. The new matter has been substituted for such parts as have been found necessary or out of date.

Chapter XXIV., on Reinforced Concrete, is entirely new, the whole manuscript being original and Mr. Miller's own

THE DOMESTIC ARCHITECTURE OF ENGLAND DURING THE TUDOR PERIOD. Thomas Garner and Arthur Stratton. 1908. Imported by Charles Scribner's Sons, New York. Portfolio of Plates. Part I. $16.00 net.

Under this subject we have a delightful study of one of the most interesting architectural periods of England and covering almost two centuries of wonderful vitality.

There is something so distinctive about home building in England that bears no comparison or imitation.

The introduction and historical text with thirty plates and numerous details are included in Part I.

The remainder of the work will follow in a later edition.

In all, the book is a valuable collection of matter, beautifully arranged and presented.

BUILDING MECHANICS' READY REFERENCE. H. G. Richey. 1908. John Wiley & Sons, New York. Morocco. 8vo. $1.50.

This is the first publication of the Plumbers' Steam-fitters' and Tinners' edition and is the latest of a series of helpful books for the use of mechanics.

A large amount of information has been arranged in tabular form so as to be more convenient for quick reference and use.

HENDRICKS' COMMERCIAL REGISTER OF THE UNITED STATES. 17th Annual 1908 Edition. Samuel E. Hendricks Co., New York. Cloth. $10.00.

The present edition requires eighty-two pages to index its contents. As each page contains 412 classifications, the six additional pages contain 2,472 additional trade classifications, making for the eighty-two pages a grand total of 33,684 headings each one of which represents the manufacturers, etc., of some machine, tool, apparatus, specialty or material.

The first edition was issued in 1891 and contained about five hundred pages while the present numbers over 1,300 pages and contains upward of 350,000 names and addresses classified under 33,684 trade headings.

SIR CHRISTOPHER WREN. Lena Milman. 1908. Imported by Charles Scribners' Sons, New York. Cloth. $2.00 net.

The life of this noted English architect is so intimately associated with the life and history of Architecture in England and America that the author has surely struck a keynote of interest in giving us the book. It may not be generally known that we have in this country (along the James River in Virginia) some excellent preservations of Sir Christohper's design. With the text matter, carefully arranged criticisms, notes and data, there are sixty-four valuable illustrations of characteristic work.

ART AND SCIENCE IN ILLUMINATION.

THE most important part of the lighting fixture, so far as the resulting illumination is concerned, is the part that has heretofore been either wholly neglected, or considered only from the decorative standpoint, that is, the globes or shades. While little more than the satisfaction of artistic fancy could be accomplished in the shades used with the old light-sources, the latest improvements in electric lamps necessitate special attention being given to this essential part of a fixture in order to secure an illumination of satisfactory quality, without losing the advantages in economy which constitute the improvements. It is not uncommon for the ordinary globe or shade to absorb from a third to a half of all the light given out. While such a loss may be justifiable in certain cases in order to secure special artistic results, such shades have not infrequently been as ugly as they were wasteful.

Realizing the present importance of the Science, as well as the Art of illumination, a series of experiments were undertaken for the purpose of devising a shade or reflector which should meet the requirements of illuminating engineering, *i. e.*, utilize to the fullest extent the advantages in economy of the new light-sources, and which would at the same time lend itself to the artistic requirements of fixture design. These experiments have been brought to a particularly gratifying conclusion. The Enos Company have produced a new reflector, which we believe will meet the approval alike of the strictly scientific illuminating engineer and the most artistic architect or client.

For a description of this reflector, we will quote from an article by Mr. L. R. Hopton in a recent issue of *The Illuminating Engineer*:

"The several elements going to make up the perfect reflector or globe may be thus stated: efficiency in resulting illumination; artistic appearance; mechanical stability; ease of cleaning and minimum liability to become soiled; reasonable limits of cost.

"Efficiency of illuminating results practically depends upon a redistribution of the rays from the light-source. For this purpose reflection is undoubtedly the better means. Regular reflection, though the most highly efficient, is out of the question where general illumination is required, for various reasons which need not be enumerated here, chief among which is the practical doubling of the glare of the original source. Diffuse or irregular reflection, then remains as the one available means; in other words, the reflector with a diffusing surface affords the best means of securing efficiency in light distribution for general illumination."

The mistake has been so frequently made of considering the globes and shades an entirely distinct and separable part of a fixture. From the artistic standpoint the glassware can no more be separated from the general design of a fixture than can the windows be considered apart from the general architecture of a building. Harmony and proportion of line, which are the most important elements in the decorative treatment of fixtures, necessarily include the outline or contour of the glassware. This especially holds true in the more simple designs, in which these elements constitute the greater part of the artistic feeling.

THE ROOF

CANADIAN KODAK COMPANY, TORONTO, ONTARIO

THE BUILDING